

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/682,224	10/682,224 10/08/2003		Motokazu Kikuchi	06920/100J055-US1	8102	
7278	7590	06/13/2005		EXAM	EXAMINER	
DARBY &		P.C.	WEIER, AN	WEIER, ANTHONY J		
NEW YORK, NY 10150-5257				ART UNIT	PAPER NUMBER	
,			1761			
			DATE MAILED: 06/13/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/682,224	KIKUCHI ET AL.					
Office Action Summary	Examiner	Art Unit					
	Anthony Weier	1761					
The MAILING DATE of this communication app Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed /s will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on							
2a) ☐ This action is FINAL . 2b) ☐ This	action is non-final.						
3) Since this application is in condition for alloward closed in accordance with the practice under E	•						
Disposition of Claims	·	•					
4) ☐ Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-9 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or							
Application Papers							
9)☐ The specification is objected to by the Examine	er.						
· · · · · · · · · · · · · · · · · · ·	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex							
Priority under 35 U.S.C. § 119	,	·					
12) △ Acknowledgment is made of a claim for foreign a) △ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority document 2. △ Certified copies of the priority document 3. ☐ Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	es have been received. es have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No. <u>09/806,804</u> . ed in this National Stage					
Attachment(s)	_						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail D						
Notice of Draitsperson's Patent Drawing Review (PTO-946) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		Patent Application (PTO-152)					

Art Unit: 1761

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of JP 01117755, Matsuura, and JP 2-49556.

Any one of JP 01117755 (see Abstract), Matsuura (Examples), and JP 2-49556 (e.g. translation, page 3) disclose a continuous process wherein soybeans are ground into a slurry and heated to such temperature as to inherently induce denaturing wherein during said heating step, the slurry is deaerated (which removes air bubbles from same) and wherein said heating comprises a first and second heating step wherein the second heating step occurs after deaeration. In addition, JP 01117755 (e.g. 90 C), Matsuura (e.g. 80 C), and JP 2-49556 (e.g. 80 C) disclose heating in the range as claimed during the deaeration.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1761

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of JP 01117755, Matsuura, and JP 2-49556.

The instant claims call for said soybean slurry to be depressurized such that the temperature of the soybean slurry decreases by at least 3 C or more. Although JP 01117755, Matsuura, and JP 2-49556 are silent concerning the amount of temperature drop during the deaeration step, it is considered inherent that some temperature drop would occur due to pressure reduction. As for the amount of temperature drop, same is considered a result effective variable and well within the purview of a skilled artisan at the time of the invention. Absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of the invention to have attained same as a matter of preference.

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2-49556 taken together with Hester et al.

JP 2-49556 further discloses flowing said soybean slurry through connected pipes, curved and straight. JP 2-49556 is silent regarding the use of connected alternating large and small pipes. However, this concept is known in the art for providing turbulence to the material carried as taught, for example, by Hester et al (see col. 24, lines 41-50). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed same as a way to provide a more uniform product through inherent mixing by said turbulence.

7. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura taken together with Hester et al.

Matsuura further discloses injection of steam directly into the soybean slurry as called for in claim 9 (e.g. Example 2). Matsuura is silent regarding the use of connected alternating large and small pipes and wherein the larger pipe is arranged in a straight line and the smaller pipe is bent in a turning configuration. The concept of using large and small pipes is known in the art for providing turbulence to the material carried as taught, for example, by Hester et al (see col. 24, lines 41-50). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed same as a way to provide a more uniform product through inherent mixing by said turbulence. As for the particular arrangement of the pipes being straight or bent, it is not seen where same would provide a patentable distinction with regard to the method. It would have been further obvious to have arrived at same as a matter of preference depending on, for example, the space constraints for the apparatus employed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Weier June 6, 2005

Anthony Weier Primary Examiner Art Unit 1761

Page 5